COMMAND CONSOLE 17&17 ZS/VP

USER MANUAL

Z Microsystems

FCC INFORMATION

WARNING ⚡ ⚠

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. ALSO, DO NOT USE THIS UNIT'S POLARIZED AC PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLETS UNLESS ALL THREE PRONGS CAN BE FULLY INSERTED.

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1. Use the power and video cables supplied with the Command Console to help prevent interference with radio and television reception. The use of cables and adapters may cause interference with electronic equipment in the vicinity of this unit.

2. This equipment has been tested and found to comply with the limits for Class "A" digital devices, pursuant to certain limits imposed by Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in when equipment is operated in commercial environments. This equipment generates, uses and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

3. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by Z Microsystems could void user's authority to operate the equipment

COMMAND CONSOLE 17 & 17ZS/VP

CAUTION ⚡ ⚠

RISK OF ELECTRIC SHOCK – DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK OF UNIT). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

⚡ This symbol warns the user that insulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.

⚠ This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore it should be read carefully in order to avoid any problems.

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SHIPMENT CONTENTS

The Command Console shipping box contains the following:

• The Command Console Unit

• Video Signal Cable

• AC Power Cable

• User Manual

Remember to save your original shipping container and packing material to transport or ship the Command Console.

SYSTEM REQUIREMENTS

The Command Console works with any computer system that provides industry standard screen formats from 640 x 480 to 1280 x 1024, with up to 75 Hz vertical sync. Required input power is 90 - 264 VAC @47-440Hz with a power consumption of 80Watts.

USER MANUAL

The User Manual comes in two formats: printed hardcopy or CD-ROM. This Manual is also available on the Z Microsystems web site (www.zmicro.com/manuals.htm).

We recommend you read this manual as follows:

Carefully follow the instructions in the Installation and Testing chapter for hookup and initial control settings. Refer to the Operation chapter for a complete description of all the user controls, and the Maintenance and Troubleshooting chapters for care and correcting any unforeseen problems with the system.

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PRODUCT DESCRIPTION

The Command Console provides a liquid crystal display, a desk work surface and storage for any size keyboard and mouse in a 3.5" high (2U) standard 19" rack or transit case.

Specially designed locks on each side of the Command Console hold the compact folded unit securely in place during storage.

Release of the two Z-Locks on the front sides of the Console allow it to slide out and the LCD display to quickly swing up into a reading position

By lifting up the desktop, the keyboard and mouse can be easily removed and set on top.

The lightweight and durable aluminum construction provides exceptional strength in field applications.

The high quality LCD screen provides full color and features up to 1280 x 1024 pixel resolution.

It can be easily adjusted to various vertical-viewing angles. The display works effectively with any workstation.

An electrostatically-applied and baked-on finish is used for extreme durability for shipboard, airborne, field deployments, and industrial or lab applications where weight and size are very critical.

TOOLS REQUIRED

Required Tools and Equipment

Flathead screwdriver with about 10" shaft.

Phillips screwdriver with about 10" shaft.

DANGER: *To avoid shock hazard:*

- *Do not remove the covers around the Command Console.*

- *Do not connect or disconnect the Command Console during an electrical storm.*

- *The power cord plug must be connected to a properly wired and grounded power outlet.*

- *Any equipment to which the Command Console will be attached must also be connected to properly wired and grounded power outlets.*

NOTE: *For the fastest and easiest installation of the Command Console, follow these steps in the sequence they are presented.*

PRECAUTIONS

In preparation to install the Command Console, take the following precautionary step:

Turn off the electrical power to your computer.

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SLIDE REMOVAL

With the Console sitting on a workbench with the front facing towards you, press down to release the Z-Locks on each side of the front of the Console to slide the side rails back.

The slide rail will reach a stop about half way back.

This is a safety stop to prevent the Console sliding out too far while mounted to the rack.

Simultaneously press in the safety catches on each slide rail and slide the side rails all the way off the back of the Console.

The slides should now be separated from the Console.

Each slide unit includes the slide rail, with the front Z-lock mount and the rear mount.

INSTALL THE SLIDES IN THE CABINET FRAME

On the front of the cabinet frame, use three Phillips screws ((V) see page 36 - Install hardware) on each side to secure the right and left Z-Lock mounts.

DO NOT tighten these screws to allow for adjustment of the Console within the cabinet frame.

On the rear of the cabinet frame, use three Phillips screws ((W) see page 36 - Install hardware) to loosely secure the right and left rear slide mount to the cabinet frame.

DO NOT tighten these screws fully at this time.

On the slide rails, using a slot screwdriver, loosen off the slide extension rail screw ((U) see page 36 - Install hardware). Repeat on each side.

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Go back on the rear of the cabinet frame, and fully tighten the three Phillips screws ((W) see page 36 - Install hardware) holding the slide extension rail to the cabinet frame.

Make sure you hold the slide mounts hard against the rack rail.

INSTALL THE COMMAND CONSOLE IN THE SLIDES

Pull the two Console slides out until they lock.

Hold the Console by each side, with the front toward you.

Feed the four cables coming out of the Console back through the cabinet frame.

Guide the Console into the slides and slide the Console in until it stops.

Simultaneously press in the catches on each slide and slide the Console all the way into the cabinet frame.
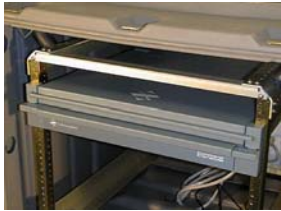
The Console should slide in and out easily.

TEST INSTALLATION AND MAKE ADJUSTMENTS

Slide the Console in and out several times.

The Console should easily close completely.

Because of variances in cabinet frames, there may need to be some adjustments of the Console slide system for best fit and movement of the Console in and out.

To be sure the slide and mount assembly are aligned properly, slide the Console in and out several times.

If the Console binds during sliding, do the following:

FINAL ADJUSTMENTS OF THE COMMAND CONSOLE

Loosen the screws on each of the front Z-Lock mounts.

Slide the Console partially out.

Use a flathead screw driver to slightly move the Z-Locks out away from the Console.

Tighten all the screws on the front Z-Lock mounts.

Slide the Console in and out to see if it moves smoothly.

Go back to the rear of the rack and fully tighten the slide extension rail ((U) see page 36 - Install hardware) screws.

Note: A wrench may be necessary to hold the nut on the other side.

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SETTING UP THE MONITOR KEYBOARD AND MOUSE

With both hands, press both the Z-Locks down and

Slide the Console all the way out.

Using both hands, gently lift the Console screen by the top bar.

Open the storage tray top.

Remove the keyboard and mouse.

Align the Keyboard and Mouse cable to pass through the recessed access notch.

Close the storage tray top, then place the keyboard and mouse on top of the tray door.

The storage tray door now becomes a work-station for the keyboard and mouse.

There should be ample cable to both units for movement around the workstation.

CLOSING DOWN THE MONITOR

Remove the keyboard and mouse from top.

Open the storage tray top.

Place the keyboard and mouse inside the tray along with all cables and close door.

Using both hands, gently drop the Console screen by the top bar until it lays flat.

Slide the Console in with both hands.

Press both the Z-Locks down and slide in the console until you hear the positive click from the lock.

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CONNECTING CABLES

NOTE: *Connecting to nonstandard systems will require an adapter. To obtain a video adapter, contact Customer Services at Z Microsystems, Inc.*

NOTE: *Incorrect cable connections may result in irregular operation, damage display quality/components of the LCD module and/or shorten the unit's life. Always consult the computer system manual. Verify the system's compatibility to ensure proper operation.*

NOTE: *Make sure the AC connector is plugged in all the way on the back side of the display.*

POWERING UP

Check that all cables are plugged in properly.

Turn on the monitor and then the computer.

Switch the Console monitor on by pushing and releasing the power switch marked.

Turn on the monitor and then the computer.

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PLUG AND PLAY

AUTO ADJUSTMENT

Adoption of the new VESA Plug and Play solution eliminates complicated and time consuming setup. It allows installation of the monitor without the usual hassles and confusion.

The PC system can easily identify and configure itself for use with the Command Console. This monitor automatically tells the PC system its Extended Display Identification (EDID) data using Display Data Channel (DDC) protocols so the PC system can automatically configure itself to use the flat panel display.

Even though the computer system can recognize the flat panel display system, the auto adjustment function will optimize the display setting for use with the computer. Auto Adjustment can be accessed through the On-Screen menu or use the direct access instructions below:

1. Turn on the computer and monitor

2. Push the EXIT button to open the Auto Adjustment OSM.

3. Push the + button to activate the Auto Adjustment function. The screen will dim and you may notice small changes to the screen image. To abort the Auto Adjustment function, press the EXIT button again.

4. When finished, the screen will stop changing. Press the EXIT button to leave the OSM or allow the OSM to time-out and disappear automatically.

CONTROLS

The flat panel display allows easy adjustment of the characteristics of the image being displayed. All of these adjustments are made using the control buttons on the front of the monitor. While using these buttons to adjust the controls, an on-screen menu shows their numeric values as they change.
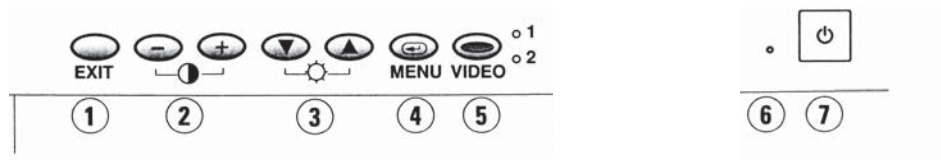
1. EXIT Button

The EXIT button opens the Auto Adjustment on-screen menu (OSM), exits from menus and sub-menus, and exits the OSM.

2. The −/+(◑) Buttons

Use these buttons to adjust items (to decrease and increase ranges) in the OSM. These buttons are also direct-access buttons for the Contrast feature control. (See the section on "Direct-Access Features")

3. The ▼/▲ (○) Buttons

These buttons are to be used with the OSM to move the selector between menus on the OSM, to select sub-menu items, and to make adjustments on some items. These buttons are also direct-access buttons for the Brightness feature control. (See the section on "Direct-Access Features")

CONTROLS

4. MENU (⬅) Button

This button is used to open the OSM system and to activate the highlighted function.

5. VIDEO Button and Indicators

Use this button to select between two different computer systems that may be connected to the monitor. Video 1 uses VGA connector and is for use with a local (at your desk) computer system, while Video 2 uses 13W3 (Sun) connector and is for use with a workstation. An indicator light glows green next to the number (1 or 2) indicating which system is active on the flat panel display screen.

6. Power Indicator

This light is steady green, steady amber, blinking amber, or blinking green/amber to indicate the power management state of the monitor. (See "Power-Saving Modes")

7. Power Button

Use this button to turn the monitor on and off.

AUTOMATIC SAVE

Whenever the on-screen menu is opened and the adjustment window is allowed to remain active for about 3 seconds without pressing another button, the monitor automatically saves any adjustments made. These changes are saved into a user area in the monitor. User areas are reserved according to the signal frequency from the computer. The monitor can save adjustments for up to 5 user modes. It has ten factory preset or preload modes, one for each signal frequency as listed in "Preset Timing Modes."

If no adjustment has been made, the on-screen menu disappears and the monitor does not save anything. To exit without saving the changes made, press the EXIT button before the 2 seconds elapse.

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DIRECT-ACCESS FEATURES
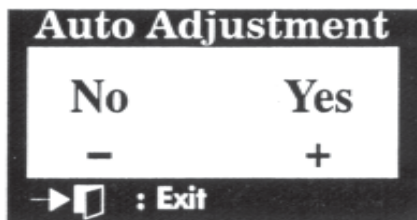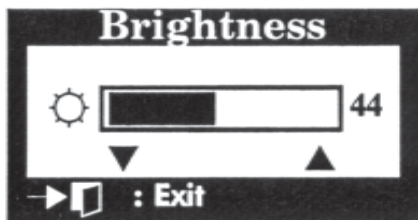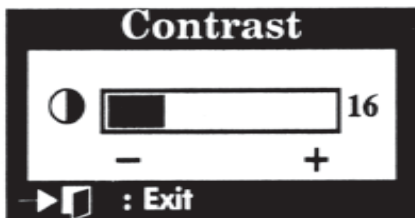
The features described in this section can be accessed quickly, at the touch of one button. Once adjustments are made to a feature, push the EXIT button to turn off the menu.

CONTRAST

Follow these instructions to adjust the contrast between darkness and lightness on the monitor's display:

1. With the menu off, push the "-" or "+" button. The contrast display appears.

2. Push the "+" button to increase the contrast; push the "-" button to decrease the contrast.

BRIGHTNESS

Follow these instructions to adjust the brightness of the monitor's display.

1. With the menu off, push the " ▼ "or " ▲ " button. The brightness display appears.

2. Push the " ▲ " button to increase the brightness, push the " ▼ " button to decrease the brightness.
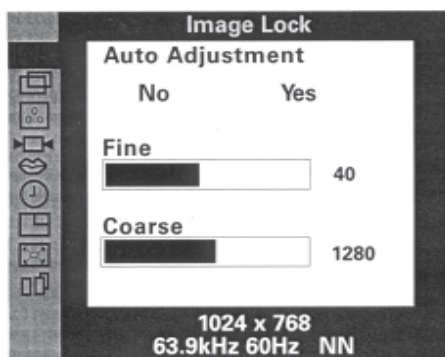
AUTO ADJUSTMENTS

Follow these instructions to enable or disable the automatic screen adjustments for the monitor.

1. With the menu off, push the EXIT button. The automatic adjustment display appears.

2. Follow the directions previously given under "Auto Adjustment".

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OSM LOCK/UNLOCK

Use this function to secure the current settings, while allowing adjustment of the Brightness and Contrast, so that they cannot be inadvertently changed. The OSM controls can be unlocked at any time by using the same procedure.

1. Push and hold the MENU button for 5 seconds to Lock or Unlock the controls. When locked, a "LOCKED" message displays.

```
                Image Lock
     Auto Adjustment
          No          Yes

     Fine
     ████████          40

     Coarse
     ██████            1280

              1024 x 768
          63.9kHz 60Hz   NN
```

ACCESSING THE MENU SYSTEM

1. With the menu off, push the MENU button to open the menu system and display the main function menu.

2. Push the " ▼ " and " ▲ " button to move between the function icons. As you move from one icon to another, the function name changes to reflect the function or group of functions represented by that icon. See the menu adjustments table that follows to view a complete list of all the functions available for the monitor.

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Icon	Settings and Sub-menus	Description
	Image Lock:	Image Lock controls adjust for and limit the amount of noise in the video signal which causes horizontal lines or areas on the screen where the image appears to be unstable and jitters or shimmers.
	• Auto Adjustment	Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment you can further tune your monitor by using the Coarse and Fine adjustments.
	• Fine • Coarse	The Fine and Coarse adjustments allow you to more closely adjust your monitor to your preference. Use the "–, +" and " ▼ , ▲ " buttons to adjust away interference. If satisfactory results are not obtained using the Fine adjustment, use the Coarse adjustment and then use Fine again. This function may change the width of the display image. Use the Horizontal function on the Position menu to center the display image on the screen.
	Position: • Vertical • Horizontal	Position moves the viewing area around on the monitor screen.
	Color Control: • R(ed) • G(reen) • B(lue)	Color Controls adjust the color hue and saturation. The color hue is most noticeable in areas of white.
	Reset: • Geometry • Color	Reset controls return the settings to the factory preset values for the selected group of functions. Geometry changes the Position settings, Image Lock settings and changes the Image Size to Expand 2. Color changes the RGB settings back to their original factory settings.

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Icon	Settings and Sub-menus	Description
	Language: • English • Deutsch • Español • Français • Italiano	Language sets the OSM to display in one of five languages (English, French, German, Spanish, or Italian). The language chosen affects only the language of the OSM. It has no effect on any software running on the computer.
	Menu Display Time: • 5 Seconds • 10 Seconds • 20 Seconds • 200 Seconds	The OSM stays active for as long as it is in use. Menu Display Time sets the length of time the OSM will remain active after the last time you pushed a button.
	Menu Position: • Vertical • Horizontal	Each time the OSM opens it displays in the same location on the screen. Menu Position controls that location.
	Image Size: • Normal • Expanded 1 • Expanded 2	If your computer or video board supplies a signal rate and addressability lower than 1280 x 1024, this FPD monitor provides a scaling processor that can expand the addressability up to 1280 x 1024. Select the Normal setting to use the normal size viewing area for the current signal. Expanded 1 expands the viewing area to the full width of the monitor screen. Expanded 2 extends the viewing area both horizontally and vertically to the full size of the monitor screen.
	Image Effect: • Scaling • Filtering	Image Effect optimizes the display for the type of software you are using. Scaling smooths an image which may help the eye to see more detail. Filtering sharpens text by adding a fine, contrasting line around each character so that it is easier to recognize.

POWER SAVER

The monitor has a built-in power management system called PowerSaver. This system saves energy by switching the monitor into a low-power mode when it has not been used for a certain amount of time. The available modes are "On", "Standby", "Sleep" and "Deep Sleep".

PowerSaver operates with a VESA DPMS compliant video card installed in the computer. Use a software utility installed in the computer to set up this feature. See the Table below for details.

State	Normal Operation	Power-Saving Function mode (EPA/NUTEK)		
		Standby Mode	Sleep Mode Position A1	Deep Sleep Mode Position A2
Horizontal Sync Vertical Sync Video	Active Active Active	Inactive Active Blanked	Active Inactive Blanked	Inactive Inactive Blanked
Power Indicator	Green	Amber	Green/Amber Blinking (0.5 sec interval)	Amber Blinking (1 sec interval)
Power Consumption	50W (Max.) 45W (Nom.)	Less than 5W	Less than 5W	Less than 5W

NOTE: The monitor automatically returns to normal operations when horizontal and vertical sync return. This occurs when you move the computer's mouse or press a key on the keyboard.

The monitor is EPA ENERGY STAR compliant and NUTEK compliant when used with a computer equipped with VESA DPMS functionality.

For energy conservation, turn the monitor OFF when it is not needed, or when leaving it unattended for long periods.

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FIELD-READY

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CONNECTORS - REAR PANEL

Video
Out

Touch Screen
Serial

Power

Host
Serial

Video
In

VGA
Graphics

Power   Touch Screen Serial   Host Serial   Video In   Video Out   VGA Graphics
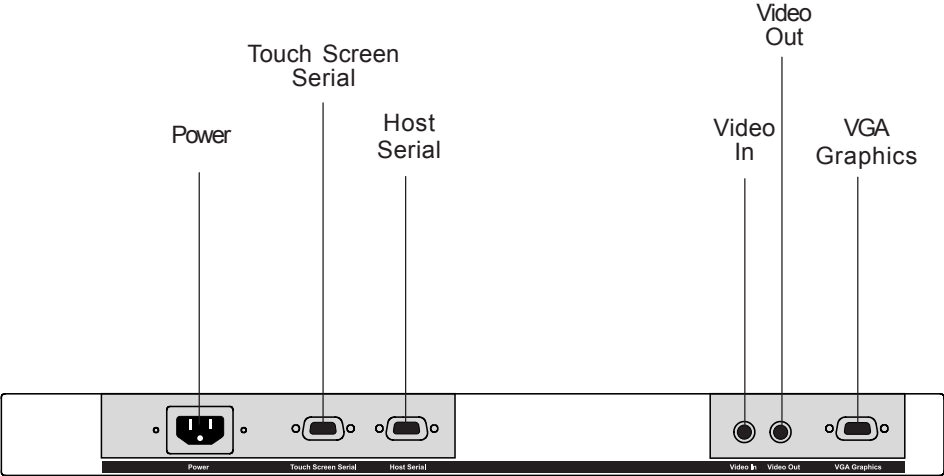
CONTROLS

The Command Console 17zs/vp features push-button controls on the lower front of the display screen to adjust various settings.

BUTTONS (from left to right)

▭ PIP
Activate or deactivate the PIP window.

∧ UP
Move up through menu functions.

∨ DOWN
Move down through menu functions.

< LEFT
Move left to adjust value for functions.

> RIGHT
Move right to adjust value for functions.

Menu MENU
Activate "On-Screen Menu". Also, use this button to activate the highlighted function.

↳ BACK
Exit "On-Screen Menu" from main menu or return from the sub-menus to main menu.

⏻ STANDBY
Place the display in "Standby" or "Active" mode.

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CONTROLS

The three LED lights on the right of the control panel are labeled A, B and C. Their lighted functions are:

A Unused

B Picture-in-Picture (PIP) (green)

C Computer Graphics (green/ orange)

   Green -- power and signal
   Orange -- power and no signal
   Off -- Standby mode

This section explains how to use the Command Console 17zs/vp control buttons to adjust the clarity of the display and image position on the screen. In particular it discusses:

• The function of each of the push-button controls.

• How to reset previously saved settings or return to factory settings.

• Tips and techniques.

The Command Console 17zs/vp control buttons allow the user to control image position, clarity and backlight operations; to store settings, and to revert to previously-saved or factory-saved settings.

ON-SCREEN MENU

On each slider bar, there is a minimum possible value (gray number) showing on the left side of the slider bar and there is a maximum possible value (gray number) showing on the right side of the slider bar.

The current value is displayed as the last number on the right side of the slider bar. Use the Left or Right buttons to adjust function to the desired value.

New user settings will be saved after exiting the Main Menu manually or by exiting the Menu by automatic time out.

Sub Menus
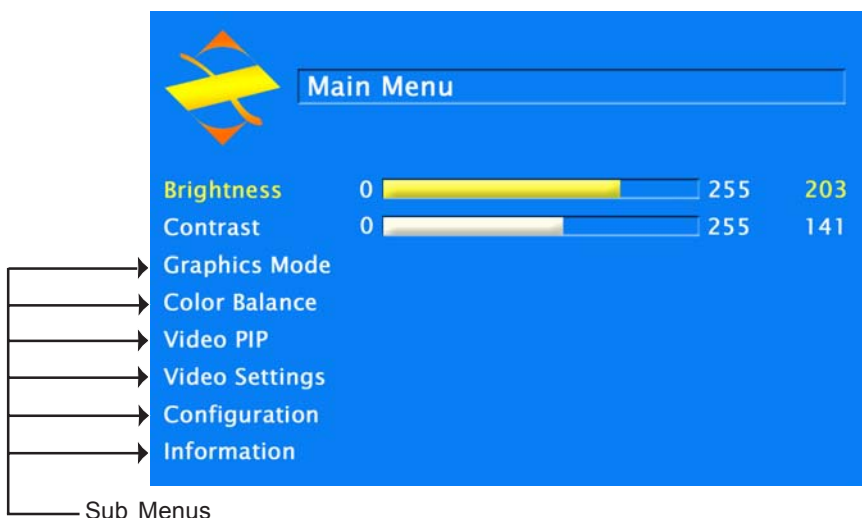
ACCESSING THE MENU SYSTEM

Using the display controls:

• If the display is blank, press the Menu button on the Display Controls. The Main Menu will be displayed.

• To change the highlighted line on the Main Menu, push the Down or Up button on the Display Controls.

• When a function is highlighted, push the Left or Right button to adjust the function's value.

• When a sub-menu is highlighted, push the Menu button to enter the sub-menu.

• To return to the main menu, push the Back button.

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MENU ADJUSTMENT

MAIN SCREEN
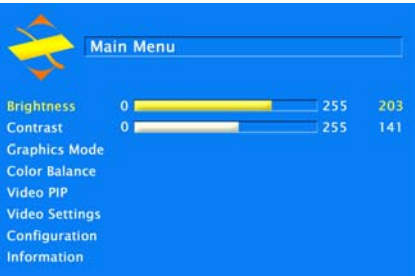
Brightness
Push the Right button to increase the brightness and the Left button to reduce the brightness.

Contrast
Push the Right button to increase contrast and the Left button to reduce the contrast.

GRAPHICS MODE
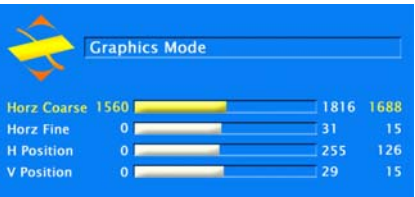
Horz. Coarse & Horz. Fine
The coarse and fine adjustments allow the user to adjust the sharpness of the image.

H & V Position
Position moves the viewing area around on the display screen.

COLOR BALANCE

Red, Green and Blue
Provides the separate adjustment of Red, Green and Blue.

MENU ADJUSTMENT

VIDEO PIP (PIP OPTION)

PIP Enable
Press Left, Right or Menu buttons to turn ON/OFF the PIP window.

PIP Size
PIP can be adjusted to any size.
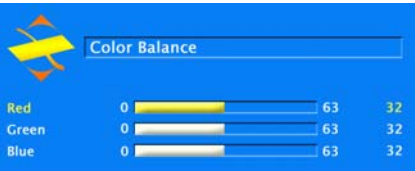
PIP Horz. & Vert.
Position moves the PIP window on the display.

VIDEO SETTING (PIP OPTION)
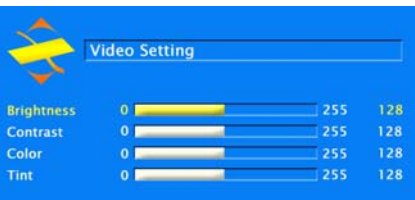
Brightness, Contrast, Color and Tint

Video settings work the same way as the Graphic settings. Push the Left or Right button to adjust the settings.

CONFIGURATION
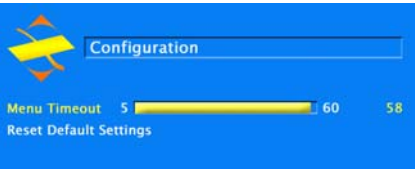
Menu Timeout
Menu Timeout sets the length of time (in seconds) the On-Screen Menu will remain active after the last time a display control button is pressed.

Reset Default Settings
Push the Left, Right or Menu button to restore all settings to the factory preset values.

INFORMATION

• Display the current graphic resolution and refresh rate.

• Display the firmware version and the date that the firmware was created.

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NO IMAGE ON DISPLAY

What is the color of the Standby LED?

Black -- No power or in Standby mode:

• Make sure the power cable is plugged in.

• Connect the power cable to a 110 V outlet, which is turned ON.

• Wake up the display by pressing the Standby button.

Orange -- There is power, but no video signal:

• Make sure the video cable is plugged into the VGA Video connector.

• Make sure there is video signal coming out of the computer.

Green -- There is power and there is video signal:

• Make sure the video signal coming out from the computer is not a black image.

• Possible hardware failure. Contact Z Microsystems Customer Support.

NO IMAGE ON PIP WINDOW (PIP OPTION)

To activate PIP window, refer to page 26 or 29.

What is the color of the PIP LED (the "B" LED)?

Black -- PIP function is OFF or there is no video signal.

• Make sure the power cable is plugged in.

• Connect the power cable to a 110V outlet, which is turned ON.

• Make sure the video (RCA) cable is plugged into the "Video In" connector.

• Make sure there is video signal coming out from the source, such as VCR player or DVD player, etc.

Green -- PIP function is ON and there is a video signal.

• It is possible the PIP is being hidden under an overlay memory display, such as the "On Screen Menu". Turn OFF overlay display or move the PIP window (see page 29) to a different location than the overlay display.

• Make sure PIP Size is not set to 0.

• Possible hardware failure. Contact Z Microsystems Customer Service.

NOTE: You may notice that the base of the Command Console 17zs/zp gets warm, this is normal. It is due to the conductive cooling technology that uses the chassis to heat sink the power supply, thereby eliminating the need for fans.

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SPECIFICATIONS

DISPLAY		MODEL 17	MODEL 17ZS/VP
	DISPLAY SIZE	17 - INCH	17 - INCH
	Display Type	AMLCD	AMLCD
	Resolution	Up to 1280 x 1024	Up to 1280 x 1024
	Pixel Configuration	RGB Vertical Stripe	RGB Vertical Stripe
	Video Input .	Analog RGB 0.7Vp-p/75 Ohm Pos.	Analog RGB 0.7Vp-p/75 Ohm Pos.
	Separate sync	TTL level	TTL level
	Composite sync	TTL level	TTL level
	Horizontal sync	Positive/Negative	Positive/Negative
	Vertical sync	Positive/Negative	Positive/Negative
	Sync on Green	Video 0.3 Vp-p Negative	Video 0.3 Vp-p Negative
	Vertical Frequency	60Hz - 85Hz	56Hz to 85Hz
	Horizontal Frequency	31.5Hz - 80kHz	24KHz to 80KHz
	Pixel Frequency	Up to 135 MHz	Up to 140 MHz
	Color Palette	16.7 millions	16.7 millions
	Contrast Ratio	200:1 typical	200:1 typical
	Pixel Pitch	0.264mm x .264mm	0.264mm x .264mm
	Luminance	170 cd/m2 (typical)	170 cd/m2 (max)
	Diagonal Dim.	17"	17"
	Horizontal	(337.92mm)	(337.92mm)
	Vertical	(270.34mm)	(270.34mm)
	Viewing Angle	80º/80º	Full +/-80º
	Control	H Pos, V Pos, Clock, H Wd, Pwr	H Pos, V Pos, Clock, Standby Pwr, Brightness, Contrast
	Optical Resp. Time	TR 34 TF 40 ms (typ)	TR 34 TF 39 ms (typ)
POWER			
	Power Consumption	60 W	80 W
	Power Supply	AC 90-260V input @ 50/60Hz	90-264V AC input@ 47-440Hz
CABLING			
	Display Cable	6' cable, HD15	6' cable, HD15
	Power Cable	6' cable, IEC	6' cable, IEC
TOTAL PACKAGING SIZE		3.5"H x 23.7"D x 19"W	3.5"H x 23.7"D x 19"W
	Total Weight	22 lbs.	22 lbs.
OPTIONS	Piture in Picture	No	Yes
ENVIRONMENTAL			
	Operating Temp	0º to + 40º C	0º to + 40º C
	Non Operating Temp	-25º to + 60º C	-25º to + 60º C
	Operating Humidity	5% to 95% Non condensing	5% to 95% Non condensing
	Non Op. Humidity	5% to 95% Non condensing	5% to 95% Non condensing
	Non Op. Altitude	-1,300 to 40,000 ft.	-1,300 to 40,000 ft.
	Operating Altitude	-1,300 to 15,000 ft.	-1,300 to 15,000 ft.
	Vibration	MIL-STD-167	MIL-STD-167
	Shock	MIL- STD 810E, Method 516, 30G (requires display arm to support monitor in upright position) MIL-S-901D (in Isolated Rack)	MIL- STD 810E, Method 516, 30G (requires display arm to support monitor in upright position) MIL-S-901D (in Isolated Rack)
	Fungus	Non Nutrients / contaminants	Non Nutrients / contaminants
RELIABILITY			
	MTBF	20,000 Hrs with Backlight change at 10,000 Hrs. Ground fixed environmental IAW MIL-HDBK-217F calculation techniques	20,000 Hrs with Backlight change at 10,000 Hrs. Ground fixed environmental IAW MIL-HDBK-217F calculation techniques
REGULATORY			
	Safety	UL 1950	UL 1950
	EMC	FCC Class A	FCC Class A
QUALITY/WORKMANSHIP			
	IPC / ISO 9002 and applicable section of MIL-HDBK-454		

MODEL   17ZS/VP

PICTURE   IN   PICTURE

|	
Image Size	Adjustable up to 1280 pixels by 960 pixels
Image Pos.	Anywhere in 1280 x 1024 display window
Video Input	NTSC M/4.43 & PAL M/N/B/G/ H/I/D composite video format with auto detection.
Color Palette	16.7 Million

MAINTENANCE OF FLAT PANEL DISPLAY

*WARNING: Be sure to turn off the power before you perform any maintenance on the monitor.*

WARNING: To avoid risk of electric shock, do not disassemble the monitor cabinet. Users cannot service the monitor. User maintenance is restricted to cleaning as explained below.

Unplug the monitor from the power outlet before cleaning.

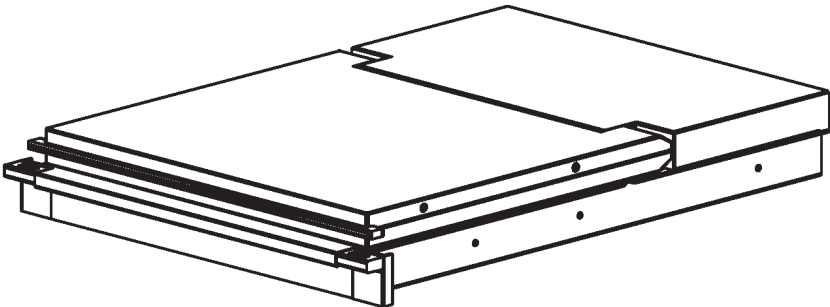• To clean the flat panel display screen, lightly dampen a soft, clean cloth with water or mild detergent. If possible, use a special screen cleaning tissue or solution suitable for the antistatic coating.

• To clean the monitor cabinet, use a cloth lightly dampened with a mild detergent.

• Never use flammable cleaning material to clean the flat panel display or any other electrical apparatus.

34

90°

Space Inside
15.87 x 23.87 x 1.71

16.42

15.70   8.3

1.96

19.00
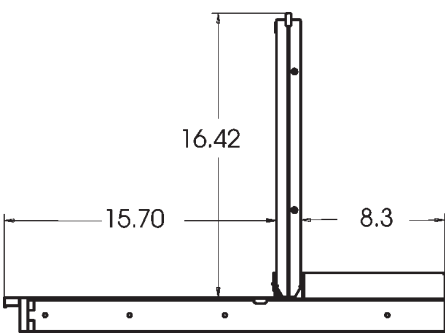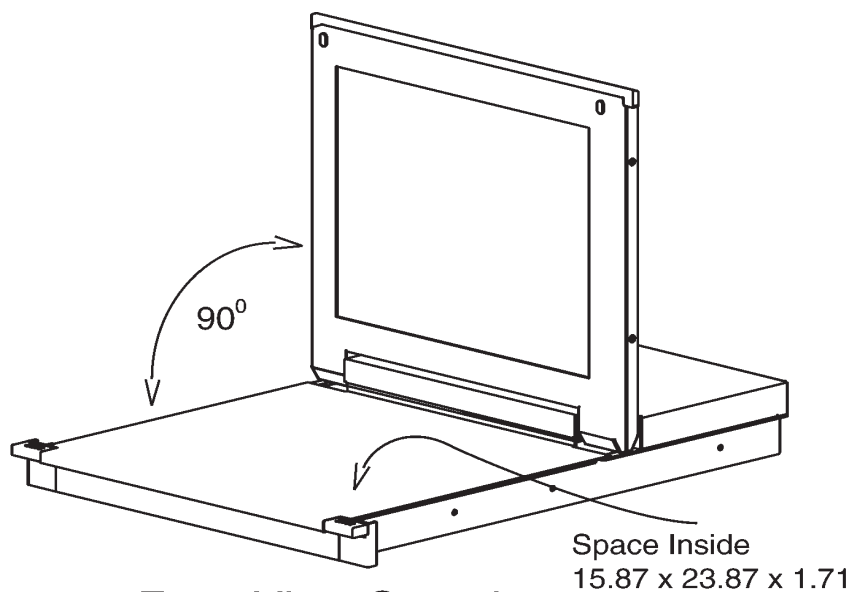
Side View Open
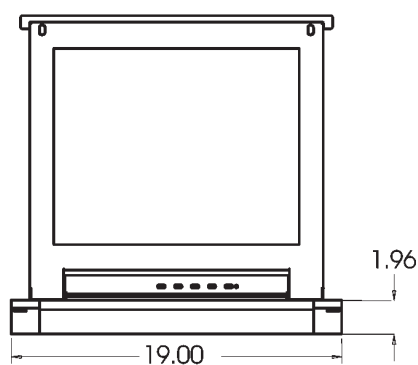
Front View Open

Front View Closed Iso

Front View Closed

16.87

23.70

Top View Closed

3.39

2U

25.41

Side View Closed
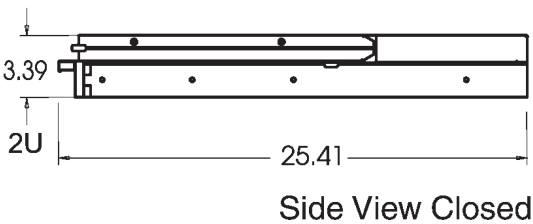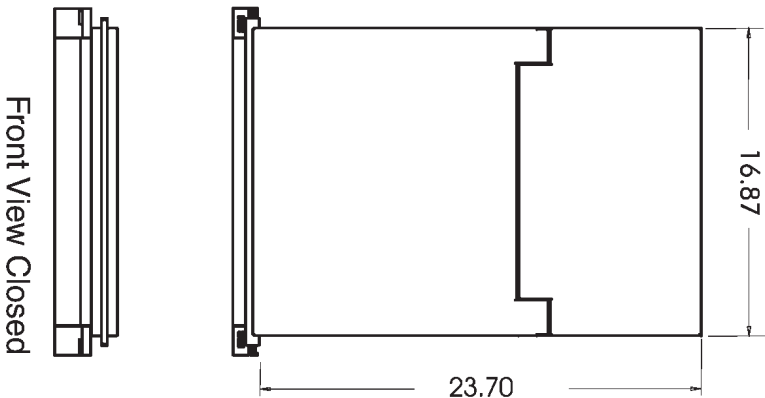
U.	01-91802	Nut 8-32 Nylon Hex & Screw Assy.
V.	01-92087	Screw, 10-32 x .375 Low Hd.
W.	01-92112	Screw, 10-32 x .75 Pan Hd. Sems (Scr. & Wash. Assy)
FF.		Command Console
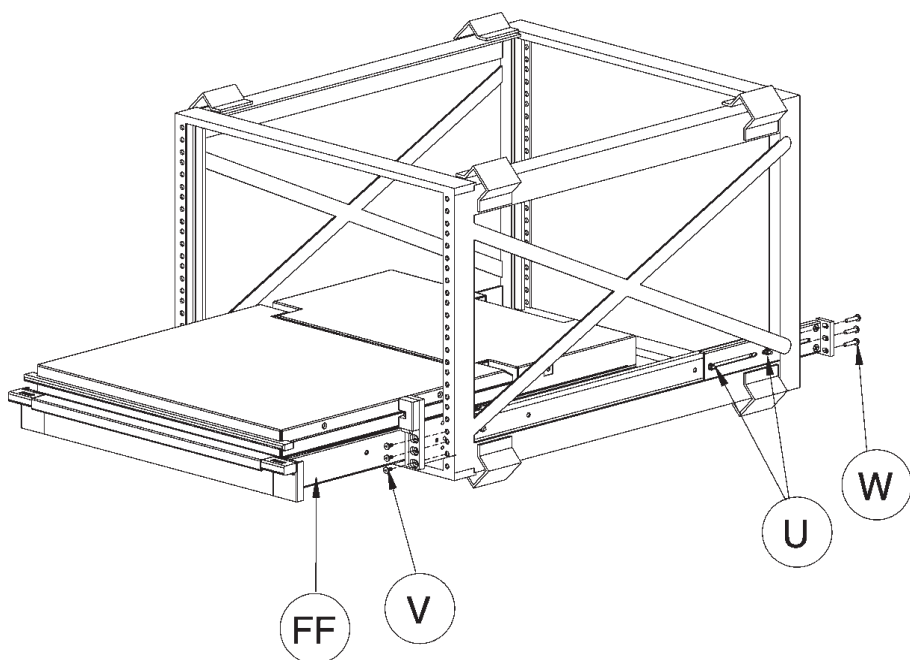
Warranty

1 YEAR STANDARD WARRANTY

Extent of Limited Warranty

1. Z Microsystems, Inc. (Z Micro) warrants to the end-user that Z Micro products will be free from defects in materials and workmanship for a specified time after the date of purchase. The duration of this limited warranty is stated above. Certain additional conditions and limitations of Z Micro's warranty are stated in the User Guide. The warranty on software products applies only to the media upon which the product is recorded. Z Micro does not warrant the operation of any product to be uninterrupted or error free.

2. Z Micro's limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any: Improper or inadequate maintenance; Hardware add-in boards, software, or interfacing not supplied by Z Micro; Unauthorized modification or misuse; Operation outside the product's environmental specifications; or improper maintenance.

3. If Z Micro receives, during the applicable warranty period, notice of a defect in a hardware product which is covered by Z Micro's warranty, Z Micro shall either repair or replace the product, at its discretion. Any replacement product may be either new or like new, provided that it has functionality at least equal to that of the product being replaced.

4. If Z Micro is unable to repair or replace, as applicable, a defective product which is covered by Z Micro's warranty, Z Micro shall, within a reasonable time after being notified of the defect, refund the purchase price for the product, provided the product is returned.

5. This Limited Warranty Statement gives the customer specific legal rights. You may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

6. Z Micro offers Extended Warranties and Service Plans. For more information, call Customer Service at 1800-524-7926 x232.

such limitations; Grant the customer additional warranty rights, specify the duration of implied warranties which the manufacturer cannot disclaim, or not allow limitations on how long an implied warranty lasts.

2. To the extent allowed by local law, the remedies provided in this Warranty Statement are the customer's sole and exclusive remedies.

Limitations of Liability

EXCEPT FOR THE OBLIGATIONS SPECIFICALLY SET FORTH IN THIS WARRANTY STATEMENT, IN NO EVENT SHALL Z MICRO BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAM-AGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITY OF SUCH DAM-AGES.

FAQ'S -- FREQUENTLY ASKED QUESTIONS

What equipment is covered?	The packing slip that comes with the equipment lists the equipment covered.
What failures are covered?	Any type of workmanship or equipment hardware failures arising from normal use of the equipment is covered. The only exclusions are for problems related to abuse, acts of god, or acts of war. Software problems are not covered.
Who do I call?	Telephone or fax the Customer Service Dept. at Z Microsystems: **(858) 657-1000 ext. 232** **(858) 657-1001 (fax)**
How long does it take?	Please have the equipment serial number and a description of the problem ready when you call. It is also handy to know the version of the operating system you are using. Your equipment should be returned to you within 30 days of its receipt at the factory. In many cases it will be less (our goal is to have your equipment on its way back within 5 days). However, if the damaged equipment has to be serviced by the original manufacturer (Seagate, NEC, for example), it may take longer.
Are there any extra costs?	The only per incident cost you will incur is **Freight In** to return the equipment to the factory. Your standard warranty covers all of the costs associated with the repair and the return shipment of the covered equipment.
What about classified data?	**DO NOT** send any data storage equipment that contains classified material. Remove the inner disks of any drive with classified information. Send only the outer casing of the disk drive. There will be a replacement charge for classified drives even if the drive is still under warranty.

FURTHER HELP

If you are unable to correct any problem yourself, contact:

Z Microsystems at:
(858) 657-1000 x232
Fax: (858) 657-1001
Web Site: http://www.zmicro.com

Before calling, please have available as much of the following information as possible:

1. Model and serial number from the label on the monitor.

2. Purchase Order.

3. Description of problem.

4. Computer type and model.

5. System configuration (hardware fitted, etc.).

6. System BIOS version number.

7. Operating System and version number.

8. Display driver version number.

9. Video Adapter type.

NOTE: If possible, stay by the computer. The Z Microsystems Technical Support Representative may wish to go through the problem over the telephone.

NOTE: More help, late-breaking news and details of the latest accessories for these products may be found on the worldwide web at: http://www.zmicro.com

REPLACING PARTS

If the Z Microsystems Technical Support Engineer determines that the product needs to be replaced, a Customer Service Representative will issue a Return Material Authorization (RMA) number and return address.

A RMA number is required to return a product to Z Microsystems, regardless of the reason for the return.

The following information is required when returning Z Microsystems products:

1. Model number
2. Serial number
3. Customer ship-to address and any special shipping requirements
4. Specific and detailed description of the problem
5. P.O. Number if out of warranty

PROVIDING FEEDBACK

We value your feedback on our products, their performance, any problems and constructive sugges-tions. Please send such productive information in writing to:

Z Microsystems
Customer Service
5945 Pacific Center Blvd.
Suite 509
San Diego, CA 92121-4309

or

http://www.zmicro.com
E-Mail: support@zmicro.com

Z Microsystems, Inc.
5945 Pacific Center Blvd., Suite 509
San Diego, CA 92121

Phone: (858) 657-1000
Fax: (858) 657-1001

Web Site: http://www.zmicro.com

Apollo

Command Console

Hydra

StarGate

Glider

Gemini

Eclipse 17

Leading the evolution
in Field-Ready Computing

Z Microsystems